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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,608	01/17/2002	John G. McCann	102-492 (P-5306)	1140
7590 01/09/2004			EXAMINER	
Becton, Dickinson and Company			TRAN, THAO T	
1 Becton Drive			ART UNIT	
Franklin Lakes, NJ 07417			PAPER NUMBER	
			1711	

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Office Action Summary**

Application No.

10/051,608

Applicant(s)

MCCANN ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on telephone interview on 22 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☒ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is in response to the Amendment received on October 29, 2003. The text of those sections not included in this Office action can be found in the prior Office action.
2. Claims 1-8 are currently pending in this application.
3. In view of the prior Office action of September 11, 2003, the objection of the oath or declaration has been withdrawn due to a new declaration filed on October 29, 2003.
4. In view of the prior Office action of September 11, 2003, the objection of claim 7 has been withdrawn due to the amendment made thereto.
5. In light of further consideration and newly found prior art, a new rejection is being made as follows:

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 6, and 7 are indefinite due to the use of "25-35 weight percent polystyrene".

The phrase does not convey what the weight percent of polystyrene is based upon. If Applicants

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mean to indicate that this is the weight percent of polystyrene based on the total weight of the polymers, please state so.

Claims 1, 6, and 7 are further indefinite due to the use of "identical tubes". It is unclear to the examiner what Applicants are referring to by using the term "identical". The term "identical" does not convey in a way that would enable one determine the parameters being used, such as size or shape, to compare the presently claimed tube to tubes of pure styrene-butadiene copolymer.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al. (US Pat. 6,270,866) in view of Blackwelder (US Pat. 5,753,326).

Okuda teaches a tube made of a heat shrinkable label film, the film comprising a blend of 33% polystyrene (50 parts polystyrene and 100 parts SB copolymer) and a styrene-butadiene block copolymer having a melt index of 0.5 to 10 (see col. 4, ln. 64-67; col. 6, ln. 38-41; col. 10, ln. 11-12, 33-38).

Okuda, however, does not teach the melt index of the polystyrene used.

Blackwelder teaches a tube made of a film, the film comprising a blend of polystyrene having a melt flow index of around 8-10 g/10 min and a styrene butadiene block copolymer (see abstract; col. 2, ln. 56-58; col. 3, ln. 36-41).

Blackwelder further teaches that the use of polystyrene having a melt flow index of around 8-10 g/10 min would reduce hazing and hence improve clarity of the product (see col. 4, ln. 50-52). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the polystyrene, taught by Blackwelder, in the blend of Okadu, for the purpose of improving clarity of the label film and hence making the printed internal surface of the label film more readable.

In regards to claims 4-5, since the sterilization with gamma radiation does not change the composition of the tube, the tube taught by JP '190 would meet the requirement of the claims.

10. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 56-045190, in view of Blackwelder (US Pat. 5,753,326) and Okuda et al. (US Pat. 6,270,866).

JP '190 teaches a centrifuge tube (test tube) comprising polystyrene or styrene-butadiene rubber (see abstract).

In regards to claims 1, 3, 6, and 7, JP '190 does not specifically teach the centrifuge tube comprising a combination of polystyrene and styrene-butadiene. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined two compositions for use of the same purpose, in order to form a third composition to be used for the same purpose. See MPEP 2144.06.

JP '190 is silent with respect to the specific weight percent and melt flow index of polystyrene and styrene-butadiene rubber.

Okuda teaches a tube, comprising 33% polystyrene and styrene-butadiene having a melt index of 0.5 to 10 (see col. 4, ln. 64-67; col. 10, ln. 37-38).

Okuda further teaches that this composition would exhibit suitable shrinking properties at low temperature and improve impact resistance (see col. 5, ln. 67, bridging col. 6, ln.2).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the amount of polystyrene and the styrene-butadiene having the melt index, taught by Okuda, in the centrifuge tube of JP '190, for the purpose of improving impact strength and melt strength.

Neither JP '190 nor Okuda teaches the melt index of polystyrene.

Blackwelder teaches a tube, comprising a blend of polystyrene having a melt flow index of around 8-10 g/10 min and a styrene butadiene block copolymer (see abstract; col. 2, ln. 56-58; col. 3, ln. 36-41).

Blackwelder further teaches that the use of polystyrene having a melt flow index of around 8-10 g/10 min would reduce hazing and hence improve clarity of the product (see col. 4, ln. 50-52). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the polystyrene, taught by Blackwelder, in the blend of the JP '190 combination, for the purpose of improving clarity of the centrifuge tube.

In regards to claim 2, JP '190 teaches a test tube, hence its bottom would inherently be a round bottom.

In regards to claims 4-5, since the sterilization with gamma radiation does not change the composition of the tube, the tube taught by JP '190 would meet the requirement of the claims.

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11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '190, Okuda, and Blackwelder as applied to claim 7 above, and further in view of Metcoff (US Pat. 4,818,516).

JP '190, Okuda, and Blackwelder as set forth in claim 7 above and incorporated herein.

The JP '190 combination does not teach the centrifuge tube having a hermetically sealed closure.

Metcoff teaches the use of a polystyrene centrifuge tube having a cap (see col. 3, ln. 18-19). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the cap, as taught by Metcoff, to hermetically seal the centrifuge tube of JP '190. This is because the use of a cap would keep the content inside and also to prevent the interior of the tube being contaminated by the environment.

### ***Contact Information***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Thao Tran*

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December 22, 2003